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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,701	03/23/2004	Gadiel Seroussi	200309194-1	5596

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HEWLETT PACKARD COMPANY
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INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

ALHIJA, SAIF A

ART UNIT	PAPER NUMBER
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2128

NOTIFICATION DATE	DELIVERY MODE
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05/29/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/807,701	Applicant(s) SEROUSSI, GADIEL	
	Examiner SAIF A. ALHIJA	Art Unit 2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 17-26 is/are pending in the application.
- 4a) Of the above claim(s) 21-26 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-20 is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 21-26 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. Claims 1-12, 17-26 have been presented for examination.

Claims 21-26 were non-elected following restriction.

Claims 13-16 have been cancelled.

Claims 1-12, and 17-20 are pending.

Reopen Prosecution

2. In view of the Appeal Brief filed on 28 January 2008, PROSECUTION IS HEREBY REOPENED.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. **Claim(s) 1-4** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Savari "Renewal Theory and Source Coding,"** hereafter referred to as **Savari** in view of **Aronov "Method of Compression of Binary Data with a Random Number Generator", U.S. Patent No. 6674908,** hereafter **Aronov.**

Regarding Claim 1:

Savari discloses A computer program product for simulating an input sequence, the product being embodied on a computer readable medium and comprising code that when executed causes a computer to perform the following:

partitioning the input sequence into a partition including a set of substrings and a tail, wherein the substrings have lengths that are not all equal; (**Paragraph 17 of Applicants specification states that the Lempel-Ziv incremental parsing rule will result in a partition that is "sure to provide substrings of 'different lengths." Lempel Ziv is discussed in Savari on Page 1695, Right Column, Paragraph 3)** and **Savari does not disclose** outputting the substrings in a random order to generate an output sequence simulating the input sequence.

However Aronov discloses outputting the substrings in a random order to generate an output sequence simulating the input sequence. (**Aronov. Claim 1, "providing lossless compression of a random said input binary sequence with a calculated random said dictionary sequence."**)

It would have been obvious to one of ordinary skill in the art at the time of the invention to output the substrings in random order as per Aronov for the sequences generated in Savari since these are known

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methods of matching output sequences to input sequences through randomization. See Aronov last limitation of claim 14)

Regarding Claim 2:

The reference discloses The product of claim 3, wherein the tail is selected from the group consisting of an empty string and the substrings of the partition. (Savari. Page 1696, Left Column, Paragraph 3, “empty string”)

Regarding Claim 3:

The reference discloses The process of claim 1, wherein partitioning the sequence comprises selecting each of the substrings to consist of one or more consecutive symbols from the input sequence, where each of the substrings differs from the other substrings of the partition. (Savari. Page 1695, Right Column, Paragraph 3. Unequal lengths implies different)

Regarding Claim 4:

The reference discloses The process of claim 1, wherein for each substring, the substring is a shortest sub-sequence of consecutive symbols from the input sequence such that the substring differs from all of the substrings that are in the partition and preceding in the input sequence. (Savari. Page 1695, Right Column, Paragraph 3. This limitation is an aspect of Lempel Ziv)

Allowable Subject Matter

4. i) **Claim 5-12 are objected** to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The reasons for allowance are held in abeyance pending resolution of the rejections of the base claims.

ii) **Claims 17-20 are allowed.** With respect to claims 17-20 the following is an examiner’s statement of reasons for allowance: claims 17-20 are considered allowable since when reading the claims in light of the

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specification, none of the references of record alone or in combination disclose or suggest the combination of limitations specified in the independent claims, **specifically limitation c.**

The prior art of record does not disclose the **outputting of a substring as recited in limitation c in combination with the tree structure and node movement of limitations a and c . See Page 10 Table I.**

The claims are rendered statutory since they present a **practical application and recite a computer program product (see page 25 of specification).**

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

5. Claims 1-4 are rejected. Claims 5-12 are objected. Claims 17-20 are allowed. Claims 21-26 are restricted.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAIF A. ALHIJA whose telephone number is (571)272-8635. The examiner can normally be reached on M-F, 11:00-7:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached on (571) 272-2279. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Kamini S Shah/

Supervisory Patent Examiner, Art Unit 2128

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SAA

May 20, 2008